FEB - 8 2011

## 510(k) Summary

[in accordance with 21 CFR 807.92(c)]

Contact:

Mr. Hartmut Loch

Vice President,

Regulatory Affairs & Quality Assurance

Phygen, LLC.

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Irvine CA 92612

Tel: 1-949-752-7885 - Fax: 1-949-752-7886

Trade Name:

LEUCADIA™ Pedicle Screw System

Common Name:

Spinal Fixation System

Classification

Name:

Appliance, Fixation, Spinal Interlaminal - §888.3050 (KWP) - class 2 Spinal Intervertebral Body Fixation Orthosis §888.3060 (KWQ) - class 2

Pedicle Screw Spinal System - §888.3070 (MNI) - class 2 Pedicle Screw Spinal System - §888.3070 (MNH) - class 2

All Orthopedic Device Panel 87

Product Codes: KWP, KWQ, MNI, & MNH

Device

Description and Characteristics:

The LEUCADIA™ Pedicle Screw System is intended to help provide correction, immobilization and stabilization of spinal segments as an adjunct to fusion of the thoracic, lumbar and/or sacral space. The LEUCADIA™ Pedicle Screw System consists of a variety of rods and screws, which can be rigidly locked into a variety of configurations, with each construct being tailor made for the individual case. Polyaxial screws are supplied in winged and non-winged configurations, in a variety of length, ranging from 30 mm to 100 mm and in 5 mm, 6 mm, 7 mm. 8mm and 9 mm diameter sizes. All sizes are able to receive 5.5mm connecting rods only. Pre-bent rods are available in 10 mm increments, ranging from 30 to 120 mm in length.

The LEUCADIA™ Pedicle Screw System implant components are fabricated from medical grade titanium alloy per ASTM F136.

Equivalence:

The modified LEUCADIA™ Pedicle Screw System is substantially equivalent to the original LAGUNA® Pedicle Screw System (K083826 S/E 22 JAN 2009 and K050060 S/E 04 MAY 2005), which is manufactured and marketed by Phygen, LLC.

#### Indications:

The LEUCADIA™ Pedicle Screw System is intended to be used in skeletally mature patients as an adjunct to fusion using autograft or allograft in posterior, non-cervical fixation for the following conditions: severe spondylolisthesis (grade 3 and 4) at L5-S1; degenerative spondylolisthesis with objective evidence of neurologic impairment; trauma (i.e. fracture or dislocation); spinal stenosis; curvatures (i.e. scoliosis, kyphosis and/or lordosis); tumor; pseudarthrosis; and/or failed previous fusion.

# Performance Data:

The following biomechanical tests have been performed:

- 1. Static Compression Bending Tests per ASTM F1717
- 2. Static Tension Bending Tests per ASTM F1717
- 3. Static Torsion Tests per ASTM F1717
- 4. Dynamic Axial Compression Bending Tests per ASTM F1717
- 5. Static Axial Gripping Capacity Tests per ASTM F1798
- 6. Static Axial Torque Tests per ASTM F1798
- 7. Static A-P Screw Pull Tests per ASTM F1798
- 8. Static Screw Pullout Tests per ASTM F543

The test results were equivalent to the predicate device and/or other similar implants and are sufficient for *in vivo* loading.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

Phygen, LLC % Mr. Hartmut Loch Vice President, Regulatory Affairs and Quality Assurance 2301 Dupont Drive, Suite 510 Irvine, California 92612

FEB - 8 2011

Re: K103102

Trade/Device Name: LEUCADIA<sup>™</sup> Pedicle Screw System

Regulation Number: 21 CFR 888.3070

Regulation Name: Pedicle screw spinal system

Regulatory Class: Class II

Product Code: MNI, MNH, KWP, KWQ

Dated: January 07, 2011 Received: January 10, 2011

Dear Mr. Loch:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

### Page 2 – Mr. Hartmut Loch

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <a href="http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm">http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</a>.

Sincerely yours,

Mark N. Melkerson

Director

Division of Surgical, Orthopedic

And Restorative Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

### Indications for Use

o to(k) Number (ii known). K to s to z
Device Name(s): LEUCADIA™ Pedicle Screw System
Indications for Use:
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Prescription Use X AND/OR Over-The-Counter-Use
(Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)
PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED
Concurrence of CDRH, Office of Device Evaluation (ODE)
(Division Sign-Off) Division of Surgical, Orthopedic, and Restorative Devices Page1 of1
510(b) Number K103102